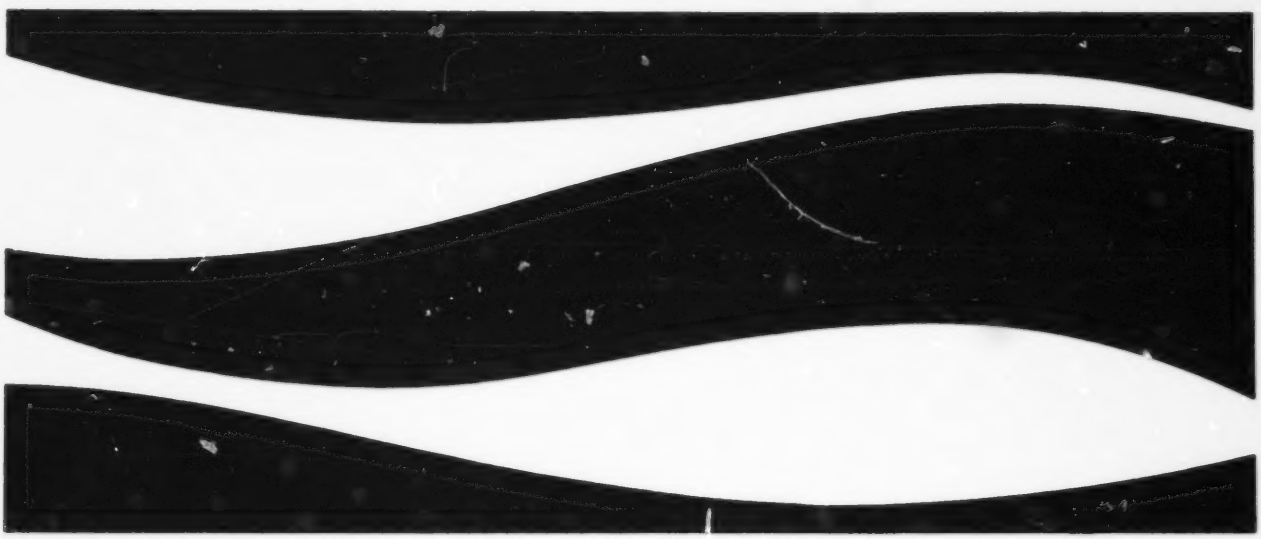
Fisheries Production Statistics Of British Columbia

1986

Province of British Columbia
Ministry of Agriculture and Fisheries
Aquaculture and Commercial Fisheries Branch
Commercial Fisheries Section



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FOREWORD

This is the sixth annual issue of the Fisheries Production Statistics of British Columbia to be published by the Province of British Columbia. As a result of the transfer of Commercial Fisheries to the Ministry of Agriculture and Fisheries in September of 1986, this issue is the first to be published by this Ministry. Prior to the 1981 edition, production statistics were published by the Department of Fisheries and Oceans, Canada dating back to 1951.

This report is a summary of fish production statistics reported in the 1986 census of fish processing plants licenced in British Columbia. The format is similar to previous years in which the majority of the text and tables document data pertaining to fish landings and production. In addition, information relating to licencing within the fishing and fish processing sectors is also reported. Three new tables have been included this year. They document the quantity and value of farmed freshwater trout, fresh and frozen dressed farmed salmon production in 1986 and a historic overview of aquaculture production in British Columbia.

It should be noted that all data on fish landings is provided by the Department of Fisheries and Oceans. As in 1985, catch data includes direct vessel exports. Information on 1985 and 1986 values include estimates of year end bonus payments to fishermen. Comparative data for 1984 only include bonuses while previous year's included neither.

All quantity data are presented in tonnes, except where otherwise indicated, and values are shown in thousands of dollars. One tonne equals 2,204.6 pounds or 1,000 kilograms.

I would like to thank the many people in the industry and various agencies of both governments who contributed to this report. Thanks also to Vicki Stevenson in preparing the manuscript.

This report was compiled under the direction of T.B. Proverbs.

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I. SUMMARY OF THE BRITISH COLUMBIA FISHING AND FISH PROCESSING INDUSTRIES - 1986

In 1986, the quantity of British Columbia fish landings increased by 6 percent from 209,634 tonnes recorded in 1985 to 221,186 tonnes in 1986[1]. The corresponding landed value however, increased by 7 percent from $377.6 million to $404.7 million. The increase in overall landings was primarily attributable to a significant increase in groundfish landings. The increased landed value reflects a general increase in landed prices. Total salmon landings declined slightly from last year while the landed value increased by 8 percent. The combined herring fisheries experienced a decrease of 36 percent in landings but the landed value was only down by 27 percent as a result of strong prices. Halibut, domestic groundfish and shellfish fisheries showed modest increases in landings and landed values. Cooperative hake fishing arrangements with foreign nations showed a substantial increase to return to historical average landings in 1986.

For the second straight year, the fish processing sector reported a record with a total wholesale value of $769 million, an increase of 5 percent from the previous year. Salmon recorded a 5 percent increase in wholesale value mainly due to the canned salmon pack which was the second largest and the most valuable ever. Halibut, groundfish and shellfish also showed substantial increases in wholesale value, up 62, 18 and 17 percent respectively. The wholesale value of herring products dropped by 14 percent.

From the perspective of the overall British Columbia economy, the commercial fishing and fish processing sectors together contributed approximately 1 percent to the Provincial gross domestic product. The wholesale value of B.C. fish products accounted for nearly 26 percent of the total value of Canadian marine fish production.

The regional distribution of the wholesale value of fisheries products processed in British Columbia remained similar to previous years, except that the lower mainland accounted for a slightly higher than average percentage. Approximately 65 percent of the total value originated from the Lower Mainland region.

A total of 16,721 personal commercial fishing licences were issued by the Department of Fisheries and Oceans in 1986, including 921 5 year licences and 15,800 traditional 1 year licences. This compares with the 1985 total of 15,567 licences, which consisted of 446 5 year licences and 15,121 1 year licences. Excluding packers, a total of 6,581 vessels were licenced to fish commercially in British Columbia in 1986.

One hundred and eighty-one firms utilizing 146 plants reported processed fish production in 1986. This figure includes 35 companies that leased facilities or had fish custom processed. In addition, production was reported by 25 fishing companies that exported fresh fish to the United States and 26 salmon mariculture operations. The Provincial Aquaculture and Commercial Fisheries Branch issued 227 fish processing licences, 444 fish buying licences, 203 fisherman's vending licences, 300 oyster picking permits and 36 marine plant harvesting licences.

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[1] The 1985 landings data reported in last year's edition of this report has been revised. 1986 data may include farmed salmonid production.

TABLE 1 - QUANTITY AND VALUE OF B.C. FISH LANDINGS BY SPECIES - 1986

	LANDED QUANTITY (Tonnes)	LANDED VALUE ($'000)	WHOLESALE VALUE ($'000)
SALMON[1]	100,242	265,778	536,223
SALMON MARICULTURE	400	2,728	2,859
SUBTOTAL	100,642	268,506	539,082
HERRING[2]	16,491	46,209	88,287
HALIBUT[3]	5,389	24,455	31,211
GROUNDFISH			
DOGFISH	2,983	868	1,327
FLOUNDER	54	25	131
HAKE[4]	36,505	5,260	5,248
LINGCOD	3,860	3,052	7,205
PACIFIC COD	3,668	2,166	5,539
PACIFIC OCEAN PERCH	6,047	3,276	6,600
POLLOCK	598	150	2,919
ROCKFISH[5]	18,781	11,832	21,357
SABLEFISH	4,686	12,354	14,140
SKATE	517	280	217
SOLE	2,753	1,856	5,834
TURBOT	892	202	1,358
OTHER GROUNDFISH	462[6]	66[6]	3,909[7]
SUB TOTAL	81,806	41,387	75,784
SHELLFISH			
ABALONE	52	734	690
CLAMS[8]	2,947	3,868	7,425
CRABS	1,321	5,661	6,082
GEODUCKS	5,006	4,294	7,088
OCTOPUS	53	136	66
OYSTERS	2,864	2,515	3,254
SEA URCHINS	2,067	1,011	3,344
SHRIMP & PRAWNS	1,318	4,974	5,658
OTHER SHELLFISH	1,101[9]	694[9]	1,280[10]
SUB TOTAL	16,729	23,887	34,887
OTHER SPECIES			
STURGEON	6	12	10
TUNA[11]	30	93	101
OTHER	93[12]	138[12]	48[13]
SUBTOTAL	129	243	159
TOTAL	221,186	404,687	769,410

TABLE 1 - CONT'D - FOOTNOTES

1 Includes salmon roe. Wholesale value includes production derived from U.S. salmon.
2 Includes herring spawn on kelp.
3 Includes total landings at United States ports of 1,188 tonnes valued at $5,689,695.
4 Includes 30,136 tonnes of hake valued at $4,378,770 delivered to foreign vessels in co-operative fishing arrangements.
5 Includes red, rock and bass, reedi, greenies, other rockfish, red snapper and silver perch.
6 Includes non-food fish, idiotfish and shark.
7 Includes other groundfish, portions, sticks and specialities, fish meal n.e.s, fish oil n.e.s., and solubles n.e.s.
8 Includes horse clams.
9 Includes scallops, squid, mussels, crayfish, snails, sea cucumbers, plankton, and other shellfish n.e.s..
10 Includes squid, scallops, mussels, sea cucumbers and other shellfish n.e.s.
11 Includes 30 tonnes worth $93,422 caught in U.S. waters and landed in Canada by Canadian fishermen.
12 Includes eulachons, smelt, anchovies and other fish.
13 Includes eulachons, smelt and floating kelp.

Note: Salmon is reported in standard form, halibut is reported dressed head-off and all other fish are reported in round weight.

TABLE 2 - LANDED AND WHOLESALE VALUE OF FISH AND FISH PRODUCTS IN B.C.

1975 - 1986

	Excludes halibut and tuna landed by B.C. fishermen at U.S. ports and hake sold to foreign processors		Includes halibut and tuna landed by B.C. fishermen at U.S. ports and hake sold to foreign processors			
YEAR	LANDED VALUE ($'000)	WHOLESALE VALUE ($'000)	LANDED VALUE ($'000)	% CHANGE	WHOLESALE VALUE ($'000)	% CHANGE
1975	76,611	163,948	79,681	- 21	167,018	- 24
1976	138,820	294,590	141,851	+ 78	297,621	+ 78
1977	165,005	359,905	167,905	+ 18	362,556	+ 22
1978	243,731	510,667	250,805	+ 49	517,741	+ 43
1979	330,019	563,181	332,972	+ 33	566,134	+ 9
1980	180,529	402,191	184,108	- 45	405,770	- 28
1981	232,358	523,754	236,156	+ 28	526,928	+ 30
1982	235,519	461,159	241,205	+ 2	466,845	- 11
1983	203,094	465,090	209,772	- 13	471,768	+ 1
1984	236,028	460,036	242,930	+ 16	466,938	- 1
1985	372,324[1]	722,243[2]	377,646	+ 55	727,565[2]	+ 56[2]
1986[3]	394,525[1]	759,341	404,687	+ 7	769,410	+ 6

1 Includes tuna caught by Canadian fishermen in U.S. waters and landed in Canada.

2 Revised data.

3 Includes the value of farmed salmonid production.

TABLE 3 - DISTRICT CATCH BY SPECIES - 1986 (LANDED WEIGHT IN TONNES)

Species	North[1] Coast	South Coast	Fraser Area	Total	Landed Value ($'000)
Chinook	1,828	2,307	285	4,420	19,658
Sockeye	4,772	17,608	7,431	29,811	143,270
Coho	5,353	6,202	111	11,666	39,264
Pink	27,961	1,299	4	24,264	25,691
Chum	12,618	11,765	539	24,922	37,614
Steelhead	145	10	3	158	277
Subtotal	52,677	39,191	8,373	100,241	265,774
Salmon Roe	1	*	*	1	4
TOTAL SALMON[2]	52,678	39,191	8,373	100,242	265,778
Herring	15,653	688	-	16,341	39,837
Herring Spawn on Kelp	133	17	-	150	6,372
TOTAL HERRING	15,786	705	-	16,491	46,209
Halibut[3]	3,503	698	*	4,201	18,765
Dogfish	135	2,685	163	2,983	868
Flounder	37	16	1	54	25
Hake[4]	-	3,446	2,923	6,369	881
Ling Cod	1,508	2,352	1	3,860	3,052
Pacific Cod	2,201	1,467	*	3,668	2,166
Pacific Ocean Perch	4,369	1,678	*	6,047	3,276
Pollock	123	312	163	598	150
Rockfish[5]	7,337	11,440	4	18,781	11,832
Sablefish	2,309	2,377	*	4,686	12,354
Skate	424	92	1	517	280
Soles	1,942	803	8	2,753	1,856
Turbot	420	472	-	892	202
Other Groundfish[6]	382	78	2	462	66
Groundfish Subtotal	21,187	27,218	3,265	51,670	37,008
Abalone	43	9	-	52	734
Clams[7]	143	2,801	3	2,947	3,868
Crabs	319	681	321	1,321	5,661
Geoducks	1,693	3,302	11	5,006	4,294
Octopus	8	45	*	53	136
Oysters	-	2,864	-	2,864	2,515
Shrimp and Prawns	176	981	161	1,318	4,974
Scallops	*	54	14	68	212
Sea Cucumbers	-	786	-	786	236
Sea Urchins	12	2,053	2	2,067	1,011
Other Shellfish[8]	13	234	-	247	246
Shellfish Subtotal	2,407	13,810	512	16,729	23,887

TABLE 3 - CONT'D

Species	North Coast	South Coast	Fraser Area	Total	Landed Value ($'000)
Eulachons	-	-	50	50	49
Smelt	-	*	1	1	3
Sturgeon	*	1	5	6	12
Tuna[9]	-	*	-	*	*
Other[10]	-	42	-	42	86
Other Subtotal	*	43	56	99	150
TOTAL[11]	95,561	81,665	12,206	189,432	391,797

1 Includes landings in the Taku/Stikine district.
2 Excludes production from salmon mariculture operations.
3 Excludes 1,188 tonnes of halibut valued at $5,689,695 landed at U.S. ports.
4 Excludes 30,136 tonnes of hake valued at $4,378,770 delivered to foreign vessels in co-operative fishing arrangements. An additional 23,742 tonnes was caught by foreign vessels in Canadian waters.
5 Includes red, rock and bass, reedi, greenies, other rockfish, red snapper and silver perch.
6 Includes non-food fish, idiotfish and shark.
7 Includes horse clams.
8 Includes mussels, snails, squid, plankton, crayfish and other shellfish N.E.S.
9 Excludes 30 tonnes worth $93,422 caught in U.S. waters and landed in Canada by Canadian fishermen.
10 Includes anchovies and other fish.
11 Includes direct deliveries by Canadian fishermen to U.S. ports.

* Less than 1 tonne reported.

Note: Salmon is reported in standard form, halibut is reported dressed head-off and all other fish are reported in round weight.

TABLE 4 - REGIONAL WHOLESALE VALUE OF B.C. FISHERIES PRODUCTION BY PRODUCT CATEGORY 1985 - 1986[1]

($000)

PRODUCT CATEGORY	LOWER MAINLAND		VANCOUVER IS.		SUNSHINE COAST		CENTRAL & NORTH COAST		TOTAL B.C.	
	1985	1986	1985	1986	1985	1986	1985	1986	1985	1986
Fresh	34,075	46,881	12,928	19,794	2,138	3,929	8,422	10,045	57,563	80,649
Frozen	139,601	162,616	52,067	36,503	403	675	67,267	60,148	259,338	259,942
Cured	92,981	79,988	7,957	8,966	11	54	31,341	38,283	132,290	127,291
Canned	166,278	190,040	4,781	4,474	-	-	87,862	83,407	258,921	277,921
Other	12,747	12,532	68	73	3	1	1,313	932	14,131	13,538
GRAND TOTAL	445,682	492,057	77,801	69,810	2,555	4,659	196,205	192,815	722,243	759,341

1 Excludes over-the-side hake sales, and halibut and tuna landed in U.S. ports but includes salmonid mariculture production.

II. SUMMARY BY SPECIES

A) SALMON

In terms of the salmon industry in British Columbia, 1986 was very similar to 1985. Salmon landings decreased by 4 percent from 104,024 tonnes in 1985 to 100,242 tonnes. The landed value however, increased from $246.7 million to $265.8 million, an 8 percent rise. This was due primarily to slightly lower landings of sockeye and pink. Nevertheless sockeye and pink landings continued to be high for the second consecutive year. Sockeye also showed a dramatic 22 percent increase in landed price to $4.65 per kg in 1986. All other species except chum and coho showed minor decreases in average landed prices, although this may reflect the inclusion of bonus payments to fishermen in recent years. Average pink landed prices dropped 16 percent from last year. In 1985, sockeye recorded the largest landed quantity, value, and average price in recent history--it remained almost the same in 1986 and accounted for 54 percent of the total landed value of all salmon species.

Seine gear accounted for 51 percent of salmon landings, while troll gear was responsible for 24 percent and gillnet gear 25 percent. Seiners harvested large quantities of pink, chum and sockeye salmon. A significant amount of sockeye and chum, along with the majority of steelhead was landed on gillnet gear. Troll gear accounted for the majority of chinook and coho landings, along with 22 percent of the sockeye catch.

As a result of the continued high level of landings, the total 1986 salmon wholesale value of $536.2 surpassed the previous record of $512.2 million set in 1985. The total wholesale values of sockeye, coho, chum and steelhead increased substantially while chinook and pink showed significant decreases. Higher average prices paid for canned and frozen dressed sockeye and canned coho also contributed to the large wholesale value. Salmon production contributed 70 percent to the total wholesale value generated by the British Columbia fish processing industry in 1986, down by one percent from 1985.

The product mix in 1986 was roughly the same as in 1985. Canned salmon accounted for 52 percent of the total salmon wholesale value, compared to 50 percent in 1985. Frozen salmon products contributed 37 percent to the 1986 salmon value, down from 40 percent last year. In 1986 large quantities of pink, sockeye and chum were directed towards the canned market. However, substantial quantities of these were also directed towards the frozen dressed market along with the majority of the chinook and coho production.

In total, the 1986 canned salmon pack consisted of 1,853,775 standard cases, the second largest pack in recent history, down from the all time high in 1985 of 1,900,479 cases. Compared to 1985, the 1986 pack represented a 2 percent decrease in volume but a 7 percent increase in wholesale value. In 1986, pink salmon accounted for 49

percent, sockeye 32, chum 14, coho 4, and others less than one percent of the number of cases produced. In terms of wholesale value, however, sockeye contributed 51 percent to the total canned salmon value, while pink accounted for 36 percent, chum 7 percent and coho 5 percent.

Fresh dressed salmon production was nearly evenly divided between head-on and head-off products, while most frozen dressed salmon was marketed in a head-off form. Frozen dressed, head-off salmon accounted for 77 percent of the total dressed production, with the highest price received for frozen dressed, head-off sockeye.

In 1986, for the first time, data on specialty hot smoked salmon products was included with other smoked products. For the second consecutive year cold smoked salmon accounted for 91 percent of the wholesale value of smoked salmon production. The total wholesale value of these products increased to $17.2 million, up by 50 percent over the previous year.

Fresh, salted, and other products, as well as roe and salmon by-products were also processed. These different products accounted for approximately 8 percent of the total wholesale value.

TABLE 5 - LANDINGS OF SALMON BY SPECIES AND GEAR 1975 - 1986

(Round Weight in Tonnes)

GILLNET GEAR

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	TOTAL[1]	VALUE	NUMBER OF DELIV.	AVERAGE CATCH PER DELIV.	AVERAGE VALUE PER DELIV.
	(t)	(t)	(t)	(t)	(t)	(t)	($'000)	('000)	(kg)	($)
1975	1,031	4,223	1,524	2,353	2,845	12,014	15,014	61	197	246
1976	1,027	7,655	1,177	3,013	4,841	17,746	25,825	78	228	331
1977	1,129	10,793	1,357	5,470	3,229	22,028	34,416	83	265	415
1978	997	7,819	1,281	2,319	6,641	19,102	38,687	69	277	561
1979	886	7,435	774	2,146	2,151	13,430	34,796	52	258	669
1980	670	3,265	848	1,711	7,548	14,084	31,042	51	276	609
1981	652	9,031	562	4,660	3,182	18,153	39,222	53	342	740
1982	917	9,817	870	526	5,525	17,742	41,387	51	348	811
1983	594	4,472	531	3,886	2,575	12,100	20,586	46	263	448
1984	763	6,542	518	1,826	2,988	12,761	35,674	51	250	699
1985	525	13,461	857	4,012	6,211	25,218	67,387	70	360	962
1986	516	11,073	981	4,217	9,216	26,130	67,689	65	402	1,041

SEINE GEAR

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	TOTAL[1]	VALUE	NUMBER OF DELIV.	AVERAGE CATCH PER DELIV.	AVERAGE VALUE PER DELIV.
	(t)	(t)	(t)	(t)	(t)	(t)	($'000)	('000)	(kg)	($)
1975	558	1,152	1,901	6,026	2,483	12,128	11,934	10	1,213	1,193
1976	492	4,395	1,197	12,790	6,044	24,925	26,712	14	1,780	1,908
1977	926	6,237	1,981	12,814	2,696	24,661	29,697	16	1,541	1,856
1978	886	11,107	1,108	12,326	8,901	34,337	57,796	13	2,641	4,446
1979	903	5,861	1,539	13,983	2,425	24,717	42,522	12	2,060	3,544
1980	588	4,327	1,252	9,650	8,972	24,796	41,854	12	2,066	3,488
1981	774	11,636	1,430	24,297	2,847	40,994	63,864	10	4,099	6,386
1982	780	12,617	1,245	3,148	9,147	26,952	51,818	10	2,695	5,181
1983	496	9,006	1,354	30,207	2,150	43,225	48,443	11	3,930	4,404
1984	444	5,791	843	7,811	5,603	20,514	38,399	13	1,578	2,953
1985	733	14,735	1,410	25,996	15,769	58,676	106,902	14	4,190	7,635
1986	580	12,944	1,776	23,679	14,152	53,156	101,972	14	3,797	7,284

TABLE 5 - CONT'D

	TROLL GEAR									
	CHINOOK	SOCKEYE	COHO	PINK	CHUM	TOTAL[1]	VALUE	NUMBER OF DELIV.	AVERAGE CATCH PER DELIV.	AVERAGE VALUE PER DELIV.
	(t)	(t)	(t)	(t)	(t)	(t)	($'000)	('000)	(kg)	($)
1975	5,701	305	4,312	1,861	60	12,241	19,965	121	102	165
1976	6,257	288	6,948	1,254	37	14,790	39,405	134	110	294
1977	5,467	358	6,519	6,439	107	18,893	44,612	146	129	303
1978	6,004	3,395	6,763	686	313	17,165	61,681	150	114	411
1979	5,056	1,236	8,029	8,567	175	23,067	83,215	163	142	511
1980	5,282	135	6,925	2,357	289	14,991	44,107	189	79	233
1981	4,490	333	5,522	9,296	128	19,774	54,984	164	121	335
1982	5,395	7,709	7,182	303	419	21,010	71,897	169	124	420
1983	4,288	848	8,576	5,445	148	19,334	42,056	170	114	247
1984	5,047	544	8,728	2,422	412	17,157	70,725	138	124	513
1985	4,211	3,373	6,710	7,692	1,666	23,669	72,381	124	191	584
1986	3,911	6,816	10,481	1,609	1,829	24,652	96,113	112	220	858

1 Totals include steelhead.

2 1976-1983 values do not include year-end bonus or direct delivery payments. 1984-1986 values include year-end bonus payments. 1985 values include direct delivery payments.

TABLE 6 - SHARE OF SALMON LANDINGS BY SPECIES AND GEAR - 1986[1]

(Round Weight in Tonnes)

SPECIES	Gillnet Tonnes	Share %	Seine Tonnes	Share %	Troll Tonnes	Share %	Total Tonnes
Chinook	516	10.3	580	11.6	3,911	78.1	5,007
Sockeye	11,073	35.9	12,944	42.0	6,816	22.1	30,833
Coho	981	7.4	1,776	13.4	10,481	79.2	13,238
Pink	4,217	14.3	23,679	80.2	1,609	5.5	29,505
Chum	9,216	36.5	14,152	56.2	1,829	7.3	25,197
Steelhead	127	80.4	25	15.8	6	3.8	158
TOTAL	26,130	25.1	53,156	51.2	24,652	23.7	103,938

TABLE 7 - LANDED AND WHOLESALE VALUE OF SALMON BY PRODUCT TYPE 1975 - 1986

($'000)

	LANDED VALUE	CANNED	FRESH	FROZEN	ROE	OTHER	TOTAL WHOLESALE VALUE
1975	46,913	43,252	9,153	36,781	6,410	4,152	99,748
1976	91,942	91,733	11,018	60,959	16,056	7,278	187,045
1977	109,176[1]	122,987	10,059	76,049	12,618	6,079	227,792
1978	158,686[1]	115,913	14,584	134,416	24,202	14,904	304,019
1979	161,113[1]	115,927	8,127	143,093	11,393	11,087	289,627
1980	117,149[1]	146,828	10,429	109,300	13,209	9,341	289,107
1981	158,226[1]	237,391	6,744	108,047	12,802	8,694	373,678
1982	165,207[1]	127,126	10,633	155,762	9,829	11,988	315,338
1983	111,097[1]	176,191	13,414	80,873	3,186	10,625	284,289
1984	144,814[1]	94,457	15,432	145,679	5,065	15,608	276,241
1985	246,696[1]	258,646	14,137	206,647	12,019	20,794	512,243
1986	265,778[1]	277,913	19,244	198,557	13,947	26,562	536,223

1 Includes salmon roe.

TABLE 8 - LANDED AND WHOLESALE VALUE OF SALMON BY SPECIES 1975 - 1986

	Quantity Landed in Tonnes (Round Weight)	Landed Value ($'000)	Average Landed Price ($/kg)	Wholesale Value ($'000)[1]	Landed Value as a Percent of Wholesale Value (%)
CHINOOK					
1975	7,289	12,172	1.67	20,270	60.0
1976	7,776	22,919	2.95	29,314	78.2
1977	7,522	23,589	3.14	36,832	64.0
1978	7,887	29,461	3.74	35,897	82.1
1979	6,845	31,159	4.55	40,475	77.0
1980	6,540	24,307	3.72	38,421	63.3
1981	5,916	25,731	4.35	38,051	67.6
1982	7,092	31,205	4.40	41,490	75.2
1983	5,378	17,614	3.28	29,489	59.7
1984	6,254	37,318	5.97	45,861	81.4
1985	5,469	25,564	4.67	41,433	61.7
1986	5,007	19,658	3.93	31,206	63.0
SOCKEYE					
1975	5,681	8,184	1.44	19,538	41.9
1976	12,339	20,656	1.67	45,701	45.2
1977	17,388	32,218	1.85	65,497	49.2
1978	22,321	55,181	2.47	107,817	51.2
1979	14,532	43,307	2.98	81,008	53.5
1980	7,727	18,222	2.36	47,416	38.4
1981	21,000	54,577	2.60	122,073	44.7
1982	30,143	78,860	2.62	155,363	50.8
1983	14,326	36,617	2.56	83,988	43.6
1984	12,877	45,976	3.57	84,191	54.6
1985	31,569	120,428	3.81	206,338	58.4
1986	30,833	143,270	4.65	237,871	60.2
COHO					
1975	7,737	12,401	1.60	19,783	62.7
1976	9,322	21,331	2.29	29,906	71.3
1977	9,857	22,671	2.30	35,396	64.0
1978	9,152	27,269	2.98	41,023	66.5
1979	10,342	44,063	4.26	57,203	77.0
1980	9,025	23,078	2.56	43,568	53.0
1981	7,514	22,009	2.93	37,984	57.9
1982	9,297	26,144	2.81	42,582	61.4
1983	10,461	22,504	2.15	39,306	57.3
1984	10,089	35,532	3.52	59,624	59.6
1985	8,977	26,555	2.96	48,362	54.9
1986	13,238	39,264	2.97	66,090	59.4

TABLE 8 - CONT'D

	Quantity Landed in Tonnes (Round Weight)	Landed Value ($'000)	Average Landed Price ($/kg)	Wholesale Value ($'000)[1]	Landed Value as a Percent of Wholesale Value (%)
PINK					
1975	10,239	6,900	0.67	21,040	32.8
1976	17,056	12,124	0.71	37,085	32.7
1977	24,723	22,262	0.90	54,767	40.6
1978	15,331	12,835	0.84	37,852	33.9
1979	24,696	29,685	1.20	76,867	38.6
1980	13,718	15,118	1.10	50,425	30.0
1981	38,253	45,822	1.20	117,302	39.1
1982	3,977	3,195	0.80	13,675	23.4
1983	39,538	26,651	0.67	103,767	25.7
1984	12,059	10,742	0.89	38,195	28.1
1985	37,700	38,979	1.03	115,160	33.8
1986	29,505	25,691	0.87	96,812	26.5
CHUM					
1975	5,389	7,206	1.34	11,588	62.2
1976	10,922	14,835	1.36	27,075	54.8
1977	6,032	7,905	1.31	16,623	47.6
1978	15,855	33,336	2.10	50,878	65.5
1979	4,751	12,243	2.58	21,262	57.6
1980	16,809	36,197	2.15	63,960	56.6
1981	6,157	9,781	1.59	21,653	45.2
1982	15,091	25,528	1.69	42,768	59.7
1983	4,899	7,605	1.55	14,735	51.6
1984	9,003	14,938	1.66	34,835	42.9
1985	23,646	34,755	1.47	75,907	45.8
1986	25,197	37,614	1.49	77,904	48.3
STEELHEAD					
1975	49	50	1.02	110	45.5
1976	47	77	1.64	139	55.4
1977	59	80	1.36	223	35.9
1978	57	82	1.44	258	31.8
1979	48	96	2.00	250	38.4
1980	52	81	1.56	247	32.8
1981	81	147	1.81	387	38.0
1982	104	170	1.63	520	32.7
1983	57	94	1.65	308	30.5
1984	150	292	1.95	1,032	28.3
1985	202	389	1.92	857	45.4
1986	158	277	1.75	895	30.9

[1] Revised. Does not include the wholesale value derived from salmon caught in U.S. waters and canned in British Columbia.

TABLE 9 - WHOLESALE VALUE OF SALMON BY SPECIES 1975 - 1986

($'000)

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	STEEL-HEAD	NOT CLASSIFIED	TOTAL WHOLESALE VALUE
1975	20,270	19,538	19,783	21,040	11,588	110	7,419	99,748
1976	29,314	45,701	29,906	37,085	27,075	139	17,825	187,045
1977	36,832	65,579	35,431	59,217	16,676	223	13,834	227,792
1978	35,897	107,817	41,023	39,544	50,878	258	28,602	304,019
1979	40,475	81,008	57,203	76,867	21,262	250	12,562	289,627
1980	38,427	68,224	43,645	58,655	64,608	248	15,300	289,107
1981	38,073	131,030	38,433	128,553	22,271	387	14,931	373,678
1982	41,495	158,492	42,595	17,813	42,887	520	11,536	315,338
1983	29,490	84,996	39,384	109,732	14,777	308	5,602	284,289
1984	45,863	86,165	59,772	44,761	35,815	1,032	2,833	276,241
1985	41,435	206,810	48,762	135,376	76,705	857	2,298	512,243
1986	31,235	244,337	68,307	108,403	79,707	895	3,339	536,223

TABLE 10 - PRODUCTION AND UTILIZATION OF SALMON BY SPECIES 1985 - 1986

	1985			1986		
UNIT	QUANTITY	VALUE[1] ($'000)	AVERAGE[2] PRICE ($)	QUANTITY	VALUE[1] ($'000)	AVERAGE[2] PRICE ($)
CHINOOK						
Canned.....48-lb. cases	4,769	505	105.87	6,417	663	103.26
Fresh Round.....000 kg	2	9	4.08	*	*	-
Fresh Dressed....000 kg	363	2,866	7.89	491	3,174	6.46
Frozen Round.....000 kg	-	-	-	-	-	-
Frozen Dressed...000 kg	3,513	34,372	9.78	3,020	23,760	7.87
Frozen Steaks....000 kg	18	168	9.12	5	43	8.13
Salted.....000 kg	34	438	12.87	*	*	-
Smoked.....000 kg	207	2,955	14.28	228	3,279	14.37
Roe.....000 kg	19	112	6.00	54	316	5.80
Other.....000 kg	-	10	-	-	-	-
TOTAL	-	41,435	-	-	31,235	-
SOCKEYE						
Canned.....48-lb. cases	583,579	117,658	201.61	599,320	141,505	236.11
Fresh Round.....000 kg	29	123	4.27	*	*	-
Fresh Dressed....000 kg	718	4,931	6.87	678	5,499	8.11
Frozen Round.....000 kg	-	-	-	-	-	-
Frozen Dressed...000 kg	9,241	69,504	7.52	9,079	78,372	8.63
Frozen Steaks....000 kg	58	628	10.76	41	458	11.19
Salted.....000 kg	703	5,792	8.24	638	6,208	9.72
Smoked.....000 kg	381	6,741	17.72	522	9,090	17.40
Roe.....000 kg	314	1,433	4.56	566	3,205	5.66
Other.....000 kg	-	-	-	-	-	-
TOTAL	-	206,810	-	-	244,337	-

TABLE 10 - CONT'D

UNIT	1985 QUANTITY	1985 VALUE[1] ($'000)	1985 AVERAGE[2] PRICE ($)	1986 QUANTITY	1986 VALUE[1] ($'000)	1986 AVERAGE[2] PRICE ($)
COHO						
Canned.....48-lb. cases	39,559	5,941	150.18	82,375	14,631	177.61
Fresh Round.....000 kg	2	10	4.17	*	*	-
Fresh Dressed....000 kg	513	2,969	5.79	1,011	5,806	5.74
Frozen Round.....000 kg	-	..	-	-	-	-
Frozen Dressed...000 kg	5,627	38,508	6.84	6,852	45,794	6.68
Frozen Steaks....000 kg	26	258	9.77	40	401	9.98
Salted.....000 kg	38	334	8.86	*	*	-
Smoked.....000 kg	30	385	13.02	91	1,288	14.08
Roe.....000 kg	51	342	6.67	59	387	6.51
Other.....000 kg	-	15	-	-	-	-
TOTAL	-	48,762	-	-	68,307	-
PINK						
Canned.....48-lb. cases	1,002,477	111,657	111.38	900,782	100,270	111.32
Fresh Round.....000 kg	6	9	1.51	*	*	-
Fresh Dressed....000 kg	803	2,196	2.73	275	755	2.74
Frozen Round.....000 kg	-	-	-	-	-	-
Frozen Dressed...000 kg	6,147	19,095	3.11	1,624	5,091	3.13
Frozen Steaks....000 kg	34	124	3.65	*	*	-
Salted.....000 kg	-	-	-	*	*	-
Smoked.....000 kg	36	382	10.61	64	697	10.93
Roe.....000 kg	552	1,897	3.43	566	1,590	2.81
Other.....000 kg	-	16	-	-	-	-
TOTAL	-	135,376	-	-	108,403	-

TABLE 10 - CONT'D

	UNIT	1985 QUANTITY	1985 VALUE[1] ($'000)	1985 AVERAGE[2] PRICE ($)	1986 QUANTITY	1986 VALUE[1] ($'000)	1986 AVERAGE[2] PRICE ($)
CHUM							
Canned	48-lb. cases	269,070	22,788	84.69	264,282	20,784	78.64
Fresh Round	000 kg	61	120	1.97	395	455	1.15
Fresh Dressed	000 kg	273	856	3.14	1,252	3,401	2.72
Frozen Dressed	000 kg	10,816	42,549	3.93	11,420	42,999	3.77
Frozen Steaks	000 kg	124	748	6.04	133	842	6.31
Salted	000 kg	*	*	-	*	*	-
Smoked	000 kg	91	1,065	11.71	243	2,777	11.42
Roe	000 kg	1,166	8,235	7.06	1,148	8,449	7.36
Other	000 kg	-	344	-	-	-	-
TOTAL		-	76,705	-	-	79,707	-
STEELHEAD							
Canned	48-lb. cases	1,025	97	94.39	599	60	99.12
Fresh Round	000kg	1	2	3.82	*	*	-
Fresh Dressed	000kg	9	46	5.17	11	64	5.85
Frozen Round	000kg	-	-	-	-	-	-
Frozen Dressed	000kg	137	693	5.06	157	752	4.77
Frozen Steaks	000kg	*	*	-	-	-	-
Smoked	000kg	2	19	11.93	1	19	15.86
Other	000kg	-	-	-			
TOTAL		-	857	-	-	895	-

TABLE 10 - CONT'D

		1985			1986		
	UNIT	QUANTITY	VALUE[1] ($'000)	AVERAGE[2] PRICE ($)	QUANTITY	VALUE ($'000)	AVERAGE PRICE ($)
ALL SALMON[4]							
Canned.....48-lb.cases		1,900,479	258,646	136.10	1,853,775	277,913	149.92
Fresh Round.....000kg		101	273	2.70	412	545	1.32
Fresh Dressed....000kg		2,679	13,864	5.18	3,718	18,699	5.03
Frozen Round.....000kg		-	-	-	*	*	-
Frozen Dressed...000kg		35,481	204,721	5.77	32,152	196,768	6.12
Frozen Steaks....000kg		260	1,926	7.41	229	1,789	7.81
Salted.....000kg		790	6,625	8.39	718	7,053	9.82
Smoked.....000kg		747	11,547	15.46	1,149	17,150	14.93
Salmon Roe[5].....000kg		2,102	12,019	5.72	2,393	13,947	5.83
Other Specialty Products		-	385	-	-	-	-
Other[6]		-	2,237	-	-	2,359	-
TOTAL		-	512,243	-	-	536,223	-

1 Note: Any discrepancies in VALUE($'000) figures are due to rounding.

2 Average Price:
Canned Salmon $'s per 48-lb. case.
Other Salmon Products $'s per kg.
Value divided by quantity may not equal average price due to rounding.

3 Less than 500 kg. and $500.

4 Note: The total value of "ALL SALMON" includes values for products including offal, oil, meal, etc. which could not be allocated to particular species. Also included are the value of items where less than three companies are reported. In a number of cases, however, confidential data is included if the total processed product represented by the confidential data is accounted for by three or more companies.

5 Includes roe not broken down by species.

6 Includes offal, offal meal, oil, heads, bait, milts, other products and the value of items where less than three companies reported.

* Confidential. Fewer than three companies reporting.

TABLE 11 - B.C. CANNED SALMON PRODUCTION BY REGION - 1986[1]

(48 lb. Cases)

AREA	CHINOOK	SOCKEYE	COHO	PINK	CHUM	STEELHEAD	TOTAL
North Coast	1,657	75,481	23,158	491,277	74,914	200	666,687
South Coast & Fraser Area	4,760	523,839	59,217	409,505	189,368	399	1,187,088
TOTAL	6,417	599,320	82,375	900,782	264,282	599	1,853,775

[1]Does not include imported salmon custom canned in B.C. for U.S. companies.

TABLE 12 - COMPARISON OF THE 1986 SALMON PACK TO THE 12 YEAR AVERAGE PACK

1975 - 1986

	1975 - 1986 Average (48 lb. cases)	1986 (48 lb. cases)	Difference (%)
Sockeye	428,449	599,320	+40
Coho	58,938	82,375	+40
Pink	608,986	900,782	+48
Chum	110,587	264,282	+139
Other	10,333	7,016	-32
TOTAL	1,217,293	1,853,775	+52

TABLE 13 - BRITISH COLUMBIA CANNED SALMON PRODUCTION : QUANTITY AND VALUE BY SPECIES - 1986[1]

SPECIES	QUANTITY (48 lb. Cases)	WHOLESALE VALUE ($'000)	AVG. PRICE $/48 lb. Case[2]	NET SELLING VALUE ($'000)	AVG. PRICE $/48 lb. Case[2]
Red Chinook	1,621	240	148.30	217	133.91
Pink Chinook	3,621	327	90.14	311	85.77
White Chinook	1,175	96	81.60	89	76.03
Sockeye	599,320	141,505	236.11	135,493	226.08
Coho	82,375	14,631	177.61	14,050	170.56
Pink	900,782	100,270	111.32	88,439	98.18
Chum	264,282	20,784	78.64	18,001	68.11
Steelhead	599	60	99.12	52	86.87
TOTAL	1,853,775	277,913	-	256,652	-

1 Fish processors were requested to report both a final wholesale value and a net selling value for their canned salmon production. The final wholesale value represents gross sales based upon company invoices. The net selling value refers to the final selling price after promotions, case allowances, cash discounts and other trade discounts which may apply.

2 Value divided by quantity may not equal average price due to rounding.

TABLE 14 - BRITISH COLUMBIA CANNED SALMON PACK BY YEAR 1975 - 1986

(48 lb. Cases)

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	STEELHEAD	TOTAL
1975	13,952	164,055	61,081	240,592	37,093	597	517,370
1976	11,173	376,047	69,850	483,054	85,540	166	1,025,830
1977	29,569	494,172	74,180	686,911	61,309	826	1,346,967
1978	8,916	485,748	53,960	456,058	121,487	707	1,126,876
1979	12,953	295,858	43,061	569,337	33,689	327	955,225
1980	7,599	368,844	88,217	472,462	176,884	420	1,114,426
1981	7,839	622,490	61,333	1,020,545	87,866	472	1,800,545
1982	7,661	548,998	47,246	140,415	74,127	384	818,831
1983	4,306	371,483	60,560	996,727	47,120	331	1,480,527
1984	2,709	230,798	25,832	338,474	68,579	276	666,668
1985	4,769	583,579	39,559	1,002,477	269,070	1,025	1,900,479
1986	6,417	599,320	82,375	900,782	264,282	599	1,853,775

TABLE 15 - AVERAGE WHOLESALE PRICE OF BRITISH COLUMBIA CANNED SALMON BY YEAR 1975 - 1986

($/48 lb. Case)

YEAR	CHINOOK	SOCKEYE	COHO	PINK	CHUM	STEELHEAD
1975	60.62	107.05	87.44	70.89	65.04	61.12
1976	63.66	115.00	95.80	73.18	66.89	65.01
1977	87.86	113.61	104.00	75.82	71.49	81.11
1978	73.01	128.69	105.43	82.89	75.81	70.19
1979	82.25	159.06	132.16	103.53	93.12	93.49
1980	93.25	168.87	134.60	114.41	100.98	98.73
1981	105.01	175.17	145.55	107.87	96.34	104.22
1982	114.61	177.12	145.87	115.96	78.11	111.98
1983	103.02	178.46	136.61	97.04	93.83	112.52
1984	103.57	198.87	146.77	112.35	93.82	89.46
1985	105.87	201.61	150.18	111.38	84.69	94.39
1986	103.26	236.11	177.61	111.32	78.64	99.12

TABLE 16 - QUANTITY AND WHOLESALE VALUE OF BRITISH COLUMBIA DRESSED SALMON PRODUCTION BY SPECIES - 1986[1]

	FRESH DRESSED						FROZEN DRESSED						TOTAL		
	Head-On			Head-Off			Head-On			Head-Off			Fresh/Frozen Dressed		
SPECIES	000 kg	$000	$/kg	000 kg	$000	$/kg	000 kg	$000	$/kg	000 kg	$000	$/kg	000 kg	$000	$/kg
Red Chinook	339	2,148	6.34	110	814	7.39	186	1,319	7.08	2,337	19,232	8.22	2,972	23,513	7.91
Pink Chinook	13	60	4.52	*	*	5.40	3	19	5.73	151	912	6.06	167	991	5.97
White Chinook	16	81	4.96	13	71	5.42	10	51	5.05	333	2,227	6.70	372	2,430	6.53
Sockeye	502	4,187	8.33	176	1,312	7.45	2,478	21,494	8.66	6,601	56,878	8.62	9,757	83,871	8.60
Coho	818	4,747	5.80	193	1,059	5.49	952	5,966	6.26	5,900	39,828	6.75	7,863	51,600	6.56
Pink	134	339	2.54	141	416	2.95	286	803	2.80	1,338	4,288	3.20	1,899	5,846	3.08
Silver Brite Chum	197	816	4.14	531	1,841	3.46	408	1,888	4.63	5,017	23,956	4.78	6,153	28,501	4.63
Semi Brite Chum	8	18	2.47	40	149	3.71	38	143	3.75	2,912	10,026	3.44	2,998	10,336	3.45
Dark Chum	*	*	2.07	475	575	1.21	65	189	2.89	2,980	6,797	2.28	3,520	7,561	2.15
Steelhead	10	59	5.80	1	5	6.35	104	496	4.74	53	256	4.81	168	816	5.01
TOTAL[2]	2,037	12,455	-	1,680	6,242	-	4,530	32,368	-	27,622	164,400	-	35,869	215,465	-

[1] Excludes farm raised salmon.
[2] Excludes products that were reported by less than three companies.
* Confidential. Fewer than three companies reporting.

Note: Value divided by quantity may not equal average price due to rounding.

TABLE 17 - FROZEN DRESSED SALMON PRODUCTION IN B.C. BY YEAR 1975-1986[1]

(Tonnes)

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	STEELHEAD
1975	3,694	225	3,306	1,224	2,526	17
1976	4,008	469	4,569	529	5,445	33
1977	4,318	1,786	5,153	2,469	2,824	31
1978	4,478	5,224	4,974	406	8,370	41
1979	4,247	4,650	6,827	4,884	3,268	36
1980	3,745	817	4,388	1,299	8,572	33
1981	3,738	2,962	4,196	5,686	2,824	56
1982	4,013	9,757	5,425	413	8,643	86
1983	2,737	2,133	5,722	4,277	2,217	53
1984	3,985	3,574	7,219	1,746	5,523	149
1985	3,513	9,241	5,627	6,147	10,816	137
1986	3,020	9,079	6,852	1,624	11,420	157

TABLE 18 - AVERAGE WHOLESALE PRICE OF FROZEN DRESSED SALMON BY YEAR 1975-1986 [1]

($/kg)

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	STEELHEAD
1975	3.48	3.48	3.35	2.60	2.91	3.53
1976	4.96	3.64	4.20	2.71	3.38	3.22
1977	5.97	4.41	4.82	2.62	3.67	3.58
1978	6.06	6.50	6.48	3.51	4.53	4.74
1979	7.42	6.06	7.05	3.44	5.14	5.64
1980	7.61	5.71	6.15	3.44	5.07	5.71
1981	8.30	6.22	6.41	3.15	4.43	5.76
1982	8.33	5.36	6.17	3.15	3.97	4.89
1983	7.51	5.24	4.91	2.58	3.87	5.00
1984	9.31	7.19	7.12	3.20	4.30	5.81
1985	9.78	7.52	6.84	3.11	3.93	5.06
1986	7.87	8.63	6.68	3.13	3.77	4.77

1 Includes both head-on and head-off products. See Table 16 for 1986 average prices of head-on and head-off products. Excludes farm raised salmon.

TABLE 19 - FRESH DRESSED SALMON PRODUCTION IN B.C. BY YEAR 1975-1986[1]

(Tonnes)

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	STEELHEAD
1975	985	138	829	305	217	4
1976	1,212	136	896	87	371	6
1977	752	187	444	244	404	6
1978	535	486	307	35	239	1
1979	530	130	370	363	31	1
1980	865	113	744	44	90	3
1981	485	128	357	144	71	2
1982	604	499	360	43	483	3
1983	853	602	557	685	260	1
1984	653	705	578	166	255	19
1985	363	718	513	803	273	9
1986	491	678	1,011	275	1,252	11

TABLE 20 - AVERAGE WHOLESALE PRICE OF FRESH DRESSED SALMON BY YEAR 1975-1986

($/kg)

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	STEELHEAD
1975	3.42	3.06	3.25	2.30	3.21	2.99
1976	4.36	3.09	3.98	2.57	3.47	3.60
1977	4.39	3.03	3.73	2.13	1.84	4.05
1978	5.31	5.86	5.23	2.34	4.54	3.73
1979	6.50	5.72	6.17	1.81	5.07	4.41
1980	5.43	4.62	5.14	2.93	3.35	4.23
1981	6.46	5.76	5.68	2.62	3.41	4.49
1982	6.92	4.99	4.78	2.73	3.62	3.97
1983	6.29	4.75	4.49	2.30	3.06	4.62
1984	8.03	6.08	6.24	2.40	3.96	5.87
1985	7.89	6.87	5.79	2.73	3.14	5.17
1986	6.46	8.11	5.74	2.74	2.72	5.85

1 Includes both head-on and head-off products. See Table 16 for 1986 average prices of head-on and head-off products. Excludes farm raised salmon.

TABLE 21 - QUANTITY AND WHOLESALE VALUE OF BRITISH COLUMBIA HOT AND COLD SMOKED SALMON - 1986

	HOT SMOKED			COLD SMOKED			TOTAL		
SPECIES	Tonnes	$'000	Avg.$/kg	Tonnes	$'000	Avg.$/kg	Tonnes	$'000	Avg.$/kg
Chinook	88	842	9.56	140	2,437	17.38	228	3,279	14.38
Sockeye	9	106	11.11	513	8,984	17.52	522	9,090	17.41
Coho	15	137	9.24	76	1,151	15.01	91	1,288	14.15
Pink	6	42	6.92	58	655	11.35	64	697	10.89
Chum	49	418	8.44	194	2,359	12.18	243	2,777	11.43
Steelhead	*	*	10.91	1	19	16.04	1	19	15.87
TOTAL	167	1,545	-	982	15,605	-	1,149	17,150	-

* Confidential. Fewer than three companies reporting.

Note: Value divided by quantity may not equal average price due to rounding. Product totals do not include confidential data.

B. HERRING

In 1986, total herring landings declined by 36 percent from 25,955 tonnes to 16,491 tonnes. The total landed value, however, dropped by only 27 percent over the same period, from $63.1 million to $46.2 million due to higher herring prices.

Specifically, roe herring landings dropped from 24,588 tonnes in 1985 to 15,732 tonnes, a decrease of 36 percent. This decrease was due to a closure on the West Coast of Vancouver Island in an effort to conserve weak stocks. The landed value also decreased by 27 percent from $62.1 million to $45.6 million. Food and bait herring landings showed dramatic decreases in 1986, from 1,367 to 759 tonnes. Similarly, the landed value also dropped from $1.1 million to $599 thousand, a decrease of 43 percent.

The total wholesale value of herring production in 1986 was $88.3 million, a decrease of 14 percent compared to $103.1 million in 1985. The wholesale value of herring roe production was $85.5 million, also down by 14 percent from 1985. The average price continued its climb from $25.51/kg to $30.66/kg, an increase of 20 percent. Combined roe herring production, including herring meal, oil and spawn on kelp, accounted for 97 percent of the total wholesale value of herring production for the third consecutive year. The wholesale value of herring frozen for food was $256 thousand while bait was valued at $1.5 million. Frozen food and bait herring in 1986 accounted for only 2 percent, as it has for the past four years. The value of other herring products, including fresh, kippered snacks, dry-salted, and pickled, totalled $1.1 million or 1 percent of the total.

TABLE 22 - ROE HERRING LANDINGS AND WHOLESALE VALUE OF ROE HERRING PRODUCTS 1975 - 1986

	LANDINGS[1] (Tonnes)	LANDED VALUE[1] ($'000)	WHOLESALE VALUE ROE ($'000)	SPAWN ON KELP ($'000)	FROZEN FOR ROE ($'000)	TOTAL WHOLESALE VALUE[4] ($'000)
1975	53,293	13,812	24,081 [2]	100	5,836	31,405
1976	78,832	23,333	52,196 [2]	597	6,444	61,848
1977	73,485	29,542	73,292	1,407	1,405	79,799
1978	63,408	52,933	130,743	2,521	3,979	141,508
1979	37,480	126,866	182,304	5,011	5,163	195,387
1980	16,414	26,357	33,074	2,448	1,058	38,297
1981	29,486	35,928	69,946	3,308	-[3]	74,198
1982	27,658	35,479	76,963	3,900	-	83,057
1983	39,155	52,902	98,094	6,455	-	107,946
1984	32,795	43,645	88,090	4,508	-[3]	96,058
1985	24,588	62,050	91,792	5,699	-	100,115
1986	15,732	45,610	77,474	6,372	-	85,454

1 Includes spawn on kelp (1975 - 1986).
2 Includes spawn off nets.
3 Confidential - fewer than three companies reporting. Included in the total wholesale value.
4 Includes roe herring by-products.

TABLE 23 - FOOD AND BAIT HERRING LANDINGS AND WHOLESALE VALUE OF FOOD AND BAIT HERRING PRODUCTS 1975 - 1986

	LANDINGS (Tonnes)	LANDED VALUE ($'000)	WHOLESALE VALUE FROZEN FOR FOOD ($'000)	BAIT ($'000)	TOTAL VALUE[1] ($'000)
1975	6,361	772	674	611	3,528
1976	2,329	542	2,207	172	3,698
1977	23,805	4,156	8,353	449	10,265
1978	18,145	4,194	9,484	1,420	13,523
1979	6,181	2,131	3,204	2,133	6,546
1980	8,909	2,891	7,207	1,597	9,919
1981	8,663	2,177	5,516	1,480	8,253
1982	1,117	450	1,010	1,463	3,391
1983	892	491	418	1,838	3,104
1984	1,080	720	125	1,920	2,898
1985	1,367	1,055	68	2,012	3,017
1986	759	599	256	1,494	2,833

1 Includes other food and bait herring products.

C. HALIBUT

The halibut catch originating in Canadian waters and delivered to British Columbia ports increased by 14 percent in 1986 from 3,687 tonnes to 4,201 tonnes. The increase in landed value was much more dramatic, rising from $10.7 to $18.8 million, an increase of 75 percent. In addition to these landings, 1,188 tonnes of halibut valued at $5,689,695 was caught in Canadian waters and delivered by Canadian fishermen to U.S. ports. This compares to 1,016 tonnes, worth approximately $3.1 million, delivered to U.S. ports in the preceding year. The total catch by British Columbia fishermen was 5,389 tonnes, valued at $24.5 million. The overall landed quantity increased by 15 percent, while the total landed value increased by 77 percent. The larger catch reflects the continued strengthening of Pacific halibut stocks, which led the International Pacific Halibut Commission to once again increase the catch limit in 1986. The tremendous increase in landed value reflects a dramatic increase in the landed price paid to fishermen since last year - the second increase in as many years, returning prices to historic levels.

The total wholesale value of halibut processed in British Columbia was $25.5 million in 1986, an increase of 62 percent over 1985. Frozen dressed halibut was once again the major product marketed with a wholesale value of $16.6 million, accounting for 65 percent of the total wholesale value. Fresh dressed halibut, with a value of $8.1 million, decreased its share of the production to 32 percent from 38 percent. Halibut fillets, steaks and "other" products were also processed. Including halibut landed by B.C. fishermen and delivered to U.S. ports, the total 1986 wholesale value was up by 65 percent from $18.8 million in 1985 to $31.2 million.

TABLE 24 - LANDINGS AND WHOLESALE VALUE OF HALIBUT IN B.C.[1]

1975 - 1986

	TOTAL LANDINGS (Tonnes)	LANDED VALUE ($'000)	AVG.LANDED PRICE ($)/KG	WHOLESALE VALUE ($'000)
1975	3,538	7,055	1.99	9,803 [2]
1976	4,318	11,974	2.77	15,347 [2]
1977	2,818	8,278	2.94	9,756
1978	2,294	10,001	4.36	12,827
1979	2,410	14,004	5.81	17,692
1980	2,668	7,341	2.75	9,962
1981	2,233	6,592	2.95	10,548
1982	1,690	4,715	2.79	5,488
1983	1,865	6,381	3.42	9,268
1984	3,110	7,222	2.32	11,640
1985	3,687	10,704	2.90	15,723
1986	4,201	18,765	4.47	25,521

1 Not including Canadian landings of halibut in Alaska and Washington.
2 Includes the value of specialty items such as fish and chips, portions, fish sticks, etc.

D. GROUNDFISH

Domestic groundfish landings continued to increase in 1986, from 45,117 tonnes to 51,670 tonnes, a rise of 15 percent. The landed value increased by 23 percent from $30.0 million to $37.0 million. Specifically, the landed values of most groundfish showed modest increases with sole, rockfish, and dogfish registering the largest. The only species exhibiting decreases were flounder, lingcod, pollock and "other groundfish". Included in "other groundfish" are idiotfish, shark and some non-food fish.

The total wholesale value of groundfish production increased by 18 percent over the 1985 value of $60.7 million, to $71.4 million. Rockfish continued to display a dramatic increase in wholesale value, rising from $18.5 million in 1985 to $28.0 million, an increase of 51 percent. Rockfish now accounts for 39 percent of the total groundfish wholesale value. The wholesale value of sablefish remained high dropping slightly from $14.9 million in 1985 to $14.1 million. The wholesale values of all the other species of groundfish except lingcod, turbot, and dogfish, increased slightly. Pacific cod and pollock displayed significant jumps in wholesale value over last year at 54 and 44 percent, respectively. It should be noted that a small amount of processed product was derived from imported groundfish.

TABLE 25 - COMPARATIVE WHOLESALE VALUES OF MAJOR GROUNDFISH SPECIES

1984 - 1986

SPECIES	1984 ($'000)	1985 ($'000)	1986 ($'000)
Sole	4,913	5,189	5,834
Rockfish[1]	14,663	18,501	27,957
Pacific Cod	7,038	3,590	5,539
Ling Cod	3,931	8,853	7,205
Sablefish	8,829	14,889	14,140
Flounder	74	73	131
Skate	120	131	217
Pollock	1,485	2,023	2,919
Turbot	1,246	1,526	1,358
Hake[2]	649	837	869
Dogfish	858	1,809	1,327
Other Groundfish[3]	3,247	3,311	3,909
TOTAL	47,053	60,732	71,405

1 Includes Pacific ocean perch, red snapper and other rockfish.
2 Excludes over-the-side sales to foreign vessels in co-operative fishing arrangements.
3 Includes other groundfish, portions, sticks and specialties, and groundfish meal, oil and solubles.

Domestic hake landings do not include cooperative fishing arrangements with foreign nations. In 1986, 30,136 tonnes worth approximately $4.4 million were purchased by the Soviet Union and Poland from Canadian fishermen. The overall increase in landings from 1985 illustrates the fact that the Soviet Union once again participated after an absence of one year. Since the initiation of over-the-side sales of hake to foreign nations, 1985 marked the first year in which both the landings and landed values decreased. This year indicates a return to the historical trends.

TABLE 26 - OVER-THE-SIDE SALES OF PACIFIC HAKE TO FOREIGN NATIONS BY YEAR[1]

1978 - 1986

	POLAND		SOVIET UNION		GREECE		TOTAL	
	Tonnes	$'000	Tonnes	$'000	Tonnes	$'000	Tonnes	$'000
1978	1,814	240	-	-	-	-	1,814	240
1979	3,102	445	1,131	162	-	-	4,233	607
1980	4,560	739	4,300	614	3,355	609	12,215	1,962
1981	4,998	826	7,232	1,190	4,929	894	17,159	2,910
1982	10,279	1,714	9,397	1,550	-	-	19,676	3,264
1983	13,465	2,270	14,192	2,363	-	-	27,657	4,633
1984	9,214	1,609	19,692	3,044	-	-	28,906	4,653
1985	13,306	2,248	-	-	-	-	13,306	2,248
1986	13,494	1,962	16,642	2,417	-	-	30,136	4,379

[1] Does not include domestic hake catch or national allocations to the Soviet Union, Poland and Japan.

E. SHELLFISH

Shellfish landings increased slightly from 16,384 tonnes in 1985 to 16,729 tonnes. This 2 percent increase reflects the overall trend towards stability in landings for most shellfish species. The only shellfish species to show decreases in reported landings in 1986 were geoducks and oysters. The total landed value was up significantly, from $21.5 million to $23.9 million, an increase of 11 percent. The landed values for all individual species followed their landings.

The total wholesale value of shellfish production increased by 17 percent from $30.0 million to $34.9 million in 1986. Clams, including geoducks, accounted for 42 percent, crab 17 percent, shrimp and prawns 16 percent, sea urchins 10 percent and oysters 9 percent. Abalone, mussels, octopus, scallops, sea cucumbers, squid and other shellfish accounted for the remaining 6 percent. Squid products demonstrated a tremendous increase with a fivefold rise over 1985; however, a significant portion of this originated outside B.C. waters. The wholesale value of octopus was the only species to show a decrease.

TABLE 27 - COMPARATIVE WHOLESALE VALUES OF MAJOR SHELLFISH SPECIES

1984 - 1986

SPECIES	1984 ($'000)	1985 ($'000)	1986 ($'000)
Abalone	560	480	690
Clams[1]	5,010	4,859	7,425
Geoducks	5,175	6,807[3]	7,088
Crabs	5,639	5,942	6,082
Octopus	110	121	66
Oysters	2,483	2,966	3,254
Shrimp	2,173	2,555	2,679
Prawns	2,886	2,880	2,979
Squid	25	120	637[4]
Mussels	3	-	5
Scallops	114	128	159
Sea Cucumbers			461
Sea Urchins	1,774	2,934	3,344
Other	33[2]	151[2]	18
TOTAL	25,985	29,943[3]	34,887

1 Includes horse clams.
2 Includes sea cucumbers and other shellfish n.e.s.
3 Revised
4 Includes products derived from squid originating outside of B.C. waters.

F. AQUACULTURE PRODUCTION

SUMMARY OF THE B.C. AQUACULTURE INDUSTRY

The Aquaculture industry in British Columbia dates back to the early 1900's when the Pacific, or Japanese oyster was imported from Japan for cultivation. Freshwater rainbow trout culture started during the 1950's and salmon aquaculture in sea pens was begun during the 1970's. The culture of other species such as sablefish, carp, abalone, mussels, clams, scallops and marine plants are undertaken on a scale that is hardly beyond the research and development phase, although some commercial production is recorded.

In 1986, the shellfish industry was comprised of 336 active tenures held by 209 growers utilizing 1,542 hectares of foreshore. These figures represent an increase of 11 per cent over 1985 in leased area and a 7 per cent increase in numbers of growers. The majority of these farms utilize off-bottom culture technology. This trend is likely to continue and expand as suitable intertidal ground is very limited. Oyster farms are currently distributed along the east and west coast of Vancouver Island and the Sunshine Coast, with the greatest production achieved in the Baynes Sound area of Vancouver Island.

Pacific oyster production amounted to 2,864 tonnes in 1986, with a reported value to the producers of $2.5 million. This is a 16 percent decrease in production from 1985 and a 4 percent decrease in value. The expanding mussel and clam industries reported 13 tonnes of production in 1986 valued at $30 thousand to the producer.

The trout farming sector consisted of 154 commercial trout farmers in 1986. Rainbow trout production for market was 101 tonnes, with a reported value of $569 thousand. This is a 22 percent increase in production from 1985 and a 31 percent increase in the value. Only 40 percent of all farmers produced product for the table market, the remaining 60 percent sold live fish to other farmers for grow-out, or operated U-catch-em ponds. Trout farms are located on private land and are not subject to the same tenure process as salmon farms.

The mid 1980's was the beginning of a boom period for the salmon farming industry on the British Columbia coast. By the end of 1986 there were 82 approved salmon farms operating in B.C., a 234 percent jump from the same time in 1985. Forty percent of these farms were concentrated in the Sunshine Coast area, although the trend is for a larger concentration of farms in the North Georgia Strait area. Production in 1986 was 400 tonnes, with a reported value of $2.7 million to the producer. This is a 233 percent increase in the quantity and value of production from 1985.

TABLE 28 - AQUACULTURE PRODUCTION IN BRITISH COLUMBIA - 1982-1986

SPECIES		1982	1983	1984	1985	1986
MARINE PEN REARED SALMONIDS	Tonnes	273	128	107	120	400
	$'000	1,136	708	702	820	2,728
TROUT	Tonnes	74	77	71	83	101
	$'000	n/a	441	433	435	569
CARP	Tonnes	n/a	14	11	9	*
	$'000	n/a	n/a	n/a	23	*
OYSTERS	Tonnes	1,579	2,453	2,897	3,420	2,864
	$'000	981	1,554	2,109	2,163	2,515
MUSSELS	Tonnes	-	-	-	n/a	6
	$'000	-	-	-	4	16
CLAMS	Tonnes	-	-	-	4	7
	$'000	-	-	-	4	14
ABALONE (experimental)	Tonnes	-	-	-	n/a	n/a
	$'000	-	-	-	n/a	n/a
MARINE PLANTS	Tonnes	n/a	n/a	*	*	*
	$'000	n/a	n/a	*	*	*

* Confidential. Fewer than three companies reporting.

1. OYSTERS

Shellfish production in British Columbia is primarily based on the culture of the Pacific oyster. In 1986, total production for this species was 2,864 tonnes, a decrease of 16 percent from 3,420 tonnes in 1985. This decrease likely reflects seed acquisition difficulties faced by industry in the early 1980's.

Higher values for shucked product helped off-set production decreases with landed value only falling 4 percent from $2.6 million to $2.5 million. The total wholesale value of all oyster products, however, showed a modest 10 percent increase from 1985, from $3.0 million to $3.3 million.

The major growth area in oyster culture continues to be half-shell production. Significant increases in 1986 pushed sales to over 311,000 dozen from 269,000 dozen in 1985. This growth is likely to continue in the near future as many new growers come on stream or continue to expand.

The use of eyed larvae for seed production continues to replace the collection of wild seed. In 1986 approximately 800 million larvae were set in British Columbia; setting success, however was lower than expected. The majority of eyed larvae continue to be imported from the United States.

TABLE 29 - BRITISH COLUMBIA OYSTER PRODUCTION - 1975 - 1986

	Production[1] (Tonnes)	Landed Value ($'000)
1975	3,246	883
1976	3,245	887
1977	2,998	981
1978	2,793	1,021
1979	2,231	893
1980	1,922	1,134
1981[2]	1,415	1,030
1982[2]	1,579	981
1983[2]	2,453	1,554
1984[2]	2,897	2,109
1985[2]	3,420	2,613
1986[2]	2,864	2,515

1 1974-1980 production data was provided by the Department of Fisheries Oceans and 1981 - 1986 data was provided by the Aquaculture Operations Unit, Ministry of Agriculture and Fisheries.

2 Includes a small amount of wild oyster harvest from picking permits.

2. SALMON

In 1986, 26 companies reported production totalling 400 tonnes worth $2.7 million. This represents a 233 percent increase in quantity and value from 1985. Production is expected to grow significantly in the future as more farms begin to market their fish.

The first marine reared rainbow trout were marketed in 1986. A total of nine tonnes of fish were produced with a value of $72 thousand.

Salmon farmers targetted their product mostly to the fresh market with a very small amount being processed frozen. The wholesale value of dressed salmon product with head on and head off was up slightly from farm value.

TABLE 30 - BRITISH COLUMBIA SALMONID MARICULTURE PRODUCTION - 1979 - 1986[1]

	COHO		CHINOOK		STEELHEAD/ HEAD		TOTAL PRODUCTION	
	Quantity (Tonnes)	Value ($'000)	Quantity (Tonnes)	Value ($'000)	Quantity (Tonnes)	Value ($'000)	Quantity (Tonnes)	Value ($'000)
1979	41	157	-	-	-	-	41	157
1980	157	898	-	-	-	-	157	898
1981	176	985	-	-	-	-	176	985
1982	230	908	43	228	-	-	273	1,136
1983	73	350	55	358	-	-	128	708
1984	64[2]	306	43	396	-	-	107	702
1985	66[2]	395	54	425	-	-	120	820
1986	304	2,014	87	642	9[3]	72	400	2,728

1 Source: British Columbia Annual Fisheries Production Statistics and British Columbia Commercial Fish Farm Statistics.

2 Includes an unspecified amount of marine pen-reared rainbow trout.

3 Includes an unspecified amount of "other" species.

TABLE 31 - QUANTITY AND VALUE OF BRITISH COLUMBIA MARINE PEN-REARED (FARMED) DRESSED SALMON BY SPECIES - 1986

	FRESH DRESSED Head-On			OTHER			TOTAL Fresh/Frozen Dressed		
SPECIES	Tonnes	$000	$/kg	Tonnes	$000	$/KG	Tonnes	$000	$/kg
Chinook	84	713	8.44	*	4	-	-	717	-
Coho	296	2,075	7.00	*	12	-	-	2,087	-
Steelhead	8	48	6.38	*	7	-	-	55	-
TOTAL	388	2,836	-	6	23	-	394	2,859	7.26

* Confidential. Fewer than three companies reporting
1 Includes fresh dressed head-off and frozen dressed head-on products.

3. FRESHWATER TROUT

For the first time, information on the trout aquaculture industry is reported. The trout aquaculture industry reported a total of 101 tonnes of market sales in 1986, representing a 22 percent increase over 1985. The total value of these sales increased by 31 percent from $435 thousand to $569 thousand.

The majority of trout was marketed as a fresh dressed head-on product accounting for about 95 percent of the production. The remainder was either sold live or as frozen product, both head-on and head-off.

Although there were 154 freshwater commercial licence-holders in 1986, only 56 (36%) of them reported any market or fee fishing sales and much of that was concentrated among a few operators. Ten of the remaining farmers had broodstock/seedstock operations and supplied eggs, fry and fingerlings to growers. However, 88 (or 57%) of the licence-holders reported no sales whatsoever.

The industry is expected to continue to grow, as many of the major operators intend to expand their production, and some have significant increases planned both at their own sites and at new grow-out sites. In addition, many of the licence-holders who were not rearing fish indicated their intention to do so in the near future.

TABLE 32 BRITISH COLUMBIA FRESHWATER TROUT FARM PRODUCTION - 1979 - 1986

	Production[1] (Tonnes)	Value ($'000)
1979	53	n/a
1980	56	n/a
1981	71	n/a
1982	74	n/a
1983	77	441
1984	71	433
1985	83	435
1986	101	569

1 Food Market Sales 1979 - 1985 data was provided by the Ministry of Environment and Parks, Fisheries Branch, in "B.C. Commercial Fish Farm Statistics".

G) MAJOR SPECIES BY PRODUCT TYPE

TABLE 33 - LANDINGS AND PRODUCTS PROCESSED IN B.C. - 1986[1]

SPECIES	QUANTITY (Tonnes)	VALUE ($'000)	AVG. PRICE[2] ($/KG)
ABALONE			
Landed	52	734	14.12
Processed:			
In Shell, Fresh or Frozen	43	690	15.94
Total Wholesale Value	-	690	-
CLAMS			
Butter Clams Landed[3]	-	-	-
Processed:			
Fresh or Frozen	78	51	0.66
Meat, Fresh or Frozen	20	80	3.99
Butter Clam Products[4]	-	7	-
Total Wholesale Value	-	138	-
Geoduck Clams Landed	5,006	4,294	0.86
Processed:			
Live	820	1,695	2.07
Neck Meat	780	4,957	6.35
Body Meat	336	436	1.30
Total Wholesale Value	-	7,088	-
Littleneck Clams Landed[3]	-	-	-
Processed:			
Fresh or Frozen	2,145	5,180	2.41
Total Wholesale Value	-	5,180	-
Other Clams Landed[5]	2,947	3,868	1.31
Processed:			
Fresh or Frozen	592	1,568	2.65
Other[6]	-	539	-
Total Wholesale Value	-	2,107	-
CRABS			
Landed	1,321	5,661	4.28
Processed:			
In Shell, Fresh	553	3,527	6.37
In Shell, Frozen	16	92	5.67
Meat, Fresh	64	1,580	24.65
Meat, Frozen	15	367	25.20
Cooked	79	457	5.78
Other[7]	-	59	-
Total Wholesale Value	-	6,082	-

TABLE 33 - CONT'D

SPECIES	QUANTITY (Tonnes)	VALUE ($'000)	AVG. PRICE[2] ($/KG)
DOGFISH			
Landed	2,983	868	0.29
Processed:			
Fresh Round	1,372	400	0.29
Frozen	126	176	1.39
Flaps	57	201	3.55
Backs	247	338	1.37
Fins & Tails	57	211	3.74
Other[8]	-	*	-
Total Wholesale Value	-	1,327	-
EULACHONS			
Landed	50	49	0.99
Processed:			
Fresh	40	41	1.01
Other[9]	-	*	-
Total Wholesale Value	-	41	-
FLOUNDER			
Landed	54	25	0.47
Processed:			
Fresh Round	114	68	0.60
Fillets, Fresh	7	36	5.36
Fillets, Frozen	6	27	3.90
Total Wholesale Value	-	131	-
PACIFIC COD			
Landed	3,668	2,166	0.59
Processed:			
Fresh Round	256	183	0.71
Fresh Dressed	12	12	0.97
Frozen Dressed	43	49	1.12
Fillets, Fresh	595	2,443	4.10
Fillets, Frozen	308	1,537	4.98
Other[10]	-	1,315	-
Total Wholesale Value	-	5,539	-
HAKE			
Landed	6,369	881	0.14
Processed:			
Fresh Round	6,546	761	0.11
Other[11]	-	108	-
Total Wholesale Value	-	869	-

TABLE 33- CONT'D

SPECIES	QUANTITY (Tonnes)	VALUE ($'000)	AVG.PRICE[2] ($/KG)
HALIBUT			
Landed (B.C. Ports)	4,201	18,765	4.47
Processed:			
Fresh Dressed	1,578	8,082	5.11
Frozen Dressed	2,687	16,602	6.17
Fillets, Fresh or Frozen	4	45	10.74
Steaks, Frozen	56	600	10.76
Other[12]	-	192	-
Total Wholesale Value	-	25,521	-
HERRING			
Landed[13]	16,491	46,209	2.80
Processed:			
Bait, Fresh or Frozen	775	1,494	1.94
Frozen for Food	273	256	0.93
Body and Offal Oil	327	149	0.46
Body and Offal Meal	1,661	1,079	0.63
Roe[14]	2,527	77,474	30.66
Spawn on Kelp	150	6,372	42.44
Other[15]	-	1,463	-
Total Wholesale Value	-	88,287	-
LING COD			
Landed	3,860	3,052	0.79
Processed:			
Fresh Round	651	504	0.77
Fresh Dressed	223	465	2.09
Frozen Dressed	193	369	1.92
Fillets, Fresh	487	2,050	4.21
Fillets, Frozen	359	1,540	4.30
Other[16]	-	2,277	-
Total Wholesale Value	-	7,205	-
MUSSELS			
Landed	2	4	1.70
Processed:			
In shell, Fresh or Frozen	2	5	2.62
Total Wholesale Value	-	5	-
OCTOPUS			
Landed	53	136	2.57
Processed:[17]			
Fresh	13	43	3.22
Frozen	3	9	3.09
Bait	3	14	4.39
Total Wholesale Value	-	66	-

TABLE 33 - CONT'D

SPECIES	QUANTITY (Tonnes)	VALUE ($'000)	AVG. PRICE[2] ($/KG)
OYSTERS			
Landed	2,864	2,515	0.88
Processed:			
Half Shell(dozens)	310,721	1,033	3.32
Meat, Fresh, 8 oz.	37	303	8.31
Meat, Fresh, 16 oz.	10	74	7.47
Meat, Fresh, 32 oz.[18]	255	1,817	7.12
Meat, Fresh, 128 oz.	2	13	6.61
Other[19]	-	14	-
Total Wholesale Value	-	3,254	-
PACIFIC OCEAN PERCH			
Landed	6,047	3,276	0.54
Processed:			
Fresh Round	1,090	764	0.71
Frozen Dressed	663	1,522	2.29
Fillets, Fresh	565	2,195	3.88
Fillets, Frozen	515	2,016	3.92
Other[20]	-	103	-
Total Wholesale Value	-	6,600	-
POLLOCK			
Landed	598	150	0.25
Processed:			
Fresh Round	19	7	0.33
Fillets, Fresh	66	195	2.95
Fillets, Frozen	39	130	3.31
Other[21]	-	2,587	-
Total Wholesale Value	-	2,919	-
PRAWNS			
Landed	550	3,734	6.79
Processed:			
Fresh	226	1,816	8.02
Frozen	52	461	8.93
Tails, Frozen, Cooked	45	673	15.04
Whole, Frozen, Cooked	3	26	8.38
Other[22]	-	3	-
Total Wholesale Value	-	2,979	-
RED SNAPPER			
Landed[23]	-	-	-
Processed:			
Fresh Round	256	560	2.18
Fresh Dressed	24	39	1.65
Frozen Dressed	246	804	3.26
Fillets, Fresh	678	2,895	4.27
Fillets, Frozen	107	434	4.06
Other[24]	-	11	-
Total Wholesale value	-	4,743	-

TABLE 33 - CONT'D

SPECIES	QUANTITY (Tonnes)	VALUE ($'000)	AVG. PRICE[2] ($/KG)
ROCKFISH			
Landed	18,781	11,832	0.63
Processed:			
Fresh Round	6,125	5,472	0.90
Fresh Dressed	67	134	2.01
Frozen Dressed	526	1,802	3.42
Fillets, Fresh	1,591	6,438	4.06
Fillets, Frozen	658	2,752	4.19
Other[25]	-	16	-
Total Wholesale Value	-	16,614	-
SABLEFISH			
Landed	4,686	12,354	2.64
Processed:			
Fresh Round	12	13	1.10
Fresh Dressed	52	199	3.82
Frozen Dressed, Japanese Cut	2,627	12,550	4.78
Frozen Dressed, Western Cut	196	933	4.77
Smoked, Dressed	52	367	7.03
Smoked Fillets	7	59	8.60
Other	-	19	-
Total Wholesale Value	-	14,140	-
SALMON			
Landed[26]	100,242	265,778	2.65
Processed:			
Fresh Round	412	545	1.32
Fresh Dressed	3,718	18,699	5.03
Frozen Dressed	32,152	196,768	6.12
Frozen Fillets & Steaks	229	1,789	7.81
Salted	718	7,053	9.82
Smoked	1,149	17,150	14.93
Canned[27] (48 lb. cases)	1,853,775	277,913	149.92
Roe[28]	2,393	13,947	5.83
Offal Meal	1,820	972	0.53
Other[29]	-	1,387	-
Total Wholesale Value		536,223	-
MARINE PEN-REARED (FARMED) SALMON			
Landed	400	2,728	6.82
Processed:			
Fresh Dressed	391	2,843	7.27
Other	-	16	-
Total Wholesale Value	-	2,859	-

TABLE 33 - CONT'D

SPECIES	QUANTITY (Tonnes)	VALUE ($'000)	AVG. PRICE[2] ($/KG)
SCALLOPS			
Landed	68	212	3.13
Processed:			
In shell, Fresh or Frozen	29	138	4.69
Other[30]	-	21	-
Total Wholesale Value	-	159	-
SEA URCHINS			
Landed	2,067	1,011	0.49
Processed:			
Roe in trays	157	3,267	20.83
Other[31]	-	77	-
Total Wholesale Value	-	3,344	-
SEA CUCUMBERS			
Landed	786	236	0.30
Processed:			
Meat	47	359	7.67
Other	-	102	-
Total Wholesale Value	-	461	-
SHRIMP			
Landed	768	1,240	1.61
Processed:[32]			
Fresh	58	230	3.99
Frozen	*	1	2.80
Shrimp Meat, Fresh	120	1,761	14.64
Shrimp Meat, Frozen	44	632	14.26
Other[33]	-	55	-
Total Wholesale Value	-	2,679	-
SKATE			
Landed	517	280	0.54
Processed:			
Fresh	8	12	1.42
Wings	87	192	2.21
Other[34]	-	13	-
Total Wholesale Value	-	217	-
SMELT			
Landed	1	3	2.79
Processed:			
Fresh or Frozen	1	3	3.24
Total Wholesale Value	-	3	-

TABLE 33 - CONT'D

SPECIES	QUANTITY (Tonnes)	VALUE ($'000)	AVG. PRICE[2] ($/KG)
SOLE			
Dover Sole Landed[35]	-	-	-
Processed:			
Fresh Round	20	22	1.12
Fillets, Fresh	80	531	6.68
Other[36]	-	98	-
Total Wholesale Value	-	651	-
English Sole Landed[35]			
Processed:			
Fresh Round	26	28	1.08
Fillets, Fresh	24	142	5.99
Other[37]	-	4	-
Total Wholesale Value	-	174	-
Petrale Sole Landed[35]			
Processed:			
Fresh Round	15	34	2.20
Frozen Round	43	124	2.89
Fillets, Fresh	48	391	8.20
Fillets, Frozen	2	13	6.55
Total Wholesale Value	-	562	-
Rock Sole Landed[35]	-	-	-
Processed:			
Fresh Round	8	15	1.94
Fillets, Fresh	35	217	6.22
Fillets, Frozen	6	17	2.75
Other[38]	-	3	-
Total Wholesale Value	-	252	-
Other Sole Landed	2,753	1,856	0.67
Processed:			
Fresh Round	155	184	1.19
Fillets, Fresh	250	1,694	6.79
Fillets, Frozen	266	1,919	7.21
Other[39]	-	398	-
Total Wholesale Value	-	4,195	-
SQUID			
Landed	79	127	1.62
Processed:			
Fresh or Frozen[40]	134	513	3.81
Fresh and Frozen Bait	111	124	1.10
Total Wholesale Value	-	637	-

TABLE 33 - CONT'D

STURGEON			
Landed	6	12	2.14
Processed:			
Fresh	2	7	3.48
Other[41]	-	3	-
Total Wholesale Value	-	10	-
TUNA			
Landed (B.C. Ports)[42]	-	-	-
Processed:			
Frozen	25	93	3.75
Other[43]	-	8	-
Total Wholesale Value	-	101	-
TURBOT			
Landed	892	202	0.23
Processed:			
Fillets, Fresh	63	165	2.60
Fillets, Frozen	155	516	3.33
Other[44]	-	677	-
Total Wholesale Value	-	1,358	-
MISCELLANEOUS FISH			
Landed[45]	672	270	-
Processed:			
Other Products[46]	-	3,931	-
Total Wholesale Value	-	3,931	-

TABLE 33 - CONT'D - FOOTNOTES

1 Any discrepancy in value figures is due to rounding.
2 Average price is based on totals prior to rounding.
3 Included in "other clams".
4 Includes canned, nectar and other butter clam products.
5 Includes horse clams.
6 Includes fresh or frozen clam meat, bait, horse clam body and neck meat and other products.
7 Includes other crab products.
8 Includes other dogfish products.
9 Includes frozen and other eulachon products.
10 Includes blocks, roe and other Pacific cod products, some of which was derived from imported Pacific cod.
11 Includes frozen hake, fillets and other products. Some hake products may be included in "other groundfish".
12 Includes frozen fletches and other halibut products.
13 Includes herring spawn on kelp.
14 Includes mature and immature roe.
15 Includes fresh kippered herring snacks, pickled, dry salted, and other herring products.
16 Includes frozen lingcod steaks, surimi and other products.
17 Some octopus products may be included in "miscellaneous fish".
18 Includes products derived from imported oysters.
19 Includes meat, fresh 12 oz., canned and other oyster products.
20 Includes blocks and other Pacific Ocean Perch products.
21 Includes frozen, blocks, roe, surimi and other pollock products derived from imported pollock.
22 Includes prawn meat frozen cooked and other products.
23 Included in rockfish.
24 Includes other red snapper products.
25 Includes blocks and other rockfish products.
26 Includes salmon roe.
27 Includes specialty packs.
28 Includes "No. 1 Grade" and "other grades."
29 Includes offal, oil, heads, bait, milts, heads, bait, milts and other salmon products.
30 Includes other scallop products.
31 Includes bulk roe and other sea urchin products.
32 Includes shrimp products derived from imported shrimp.
33 Includes other shrimp products.
34 Includes frozen skate and other products.
35 Included in "other sole."
36 Includes frozen round dover sole and frozen fillets.
37 Includes frozen English sole fillets and fresh/frozen dressed products.
38 Includes frozen round and fresh/frozen dressed rock sole products.
39 Includes frozen round and fresh/frozen dressed blocks and other sole products.
40 Includes products derived from squid originating from outside B.C. waters.
41 Includes frozen and other sturgeon products.
42 Does not include 30 tonnes worth $93,422 caught in U.S. waters and landed in Canada by Canadian fishermen.
43 Includes smoked and other tuna products. Also includes tuna products derived from imported tuna (U.S. or international water origin).
44 Includes fresh and frozen round turbot, blocks and other products, derived from imported turbot.
45 Includes non food fish, snails, idiotfish, plankton, shark, anchovies, crayfish, and other fish and shellfish n.e.s.
46 Includes "other crayfish," "portions, sticks and specialty" products, "other shellfish," fish meal n.e.s., fish oil n.e.s., solubles n.e.s., and kombu.

III. LICENCING OF THE B.C. FISHING AND FISH PROCESSING SECTORS - 1986

The total number of personal commercial fishing licences issued by the Department of Fisheries and Oceans in 1986 increased by 7 percent from 15,567 in 1985 to 16,721. Due to the fact that 1986 was the fifth year in which a 5 year licence was issued, the overall change in numbers of licences issued may not actually reflect a change in the number of people licenced to fish - i.e. holders of 5 year licences only renew every five years. A total of 921 5 year licences, as well as 15,800 traditional 1 year licences were issued compared to 487 and 15,121 issued in 1985, respectively. It should be noted that a total of 4,233 5 year licences were valid during 1986.

Overall the number of licences issued by the Department of Fisheries and Oceans for commercial fisheries remained relatively constant for the sixth consecutive year. All categories of limited entry licences displayed only minor fluctuations but there were some significant changes in the number of unlimited entry (Z) fisheries licences issued. Most categories showed increases since 1985, but squid continued to decline in number. The introduction of a new Z licence (N) for rockfish by hook and line gear brought a shift of vessels from the previous C category.

The number of fish processing licences issued by the Ministry of Agriculture of Fisheries increased by 17 percent in 1986, from 191 to 224. The number of roe herring and finfish processing licences issued declined, while the number of salmon and invertebrate rose slightly. A total of 2 marine plant processing licences were issued in 1986.

For the first time in five consecutive years, the number of fish buying licences issued to persons and/or companies increased in all except the salmon category, which remained the same. A total of 444 were issued in 1986, compared to 367 in 1985, an increase of 17 percent. Specifically, the number of fish buying decals issued were: 273 for salmon, 185 for roe herring, 113 for other finfish and 83 for invertebrates. A total of 203 fisherman's vending licences were also issued in 1986, as compared to 197 in 1985. Finally, 300 oyster picking permits and 36 marine plant harvesting permits were issued by the Ministry of Agriculture and Fisheries.

TABLE 34 - THE NUMBER OF PERSONAL COMMERCIAL FISHING LICENCES ISSUED BY THE DEPARTMENT OF FISHERIES AND OCEANS: BY DISTRICT 1984-86 [1]

	1984		1985		1986	
	1 Year	5 Year[2]	1 Year	5 Year[2]	1 Year	5 Year[2]
KAMLOOPS	7		6		8	
NEW WESTMINSTER	2,161	154	2,243	126	2,267	234
NANAIMO	3,334	59	3,551	60	3,965	82
PORT ALBERNI	1,340		1,330	1	1,350	12
CAMPBELL RIVER	2,097		2,209	11	2,344	158
KITIMAT	314		n/a[3]	n/a[3]	n/a[3]	n/a[3]
PRINCE RUPERT	1,321	55	2,350[3]	68[3]	2,385	113
QUEEN CHARLOTTE CITY	322		n/a[3]	n/a[3]	n/a[3]	n/a[3]
VICTORIA	1,455		1,486	4	1,458	64
VANCOUVER	1,782	219	1,881	176	1,938	258
WHITEHORSE	27		65		85	-
TOTAL	14,160	487	15,121	446	15,800	921

1 Information provided by the Licencing Section, Department of Fisheries and Oceans.

2 A total of 3,027 5 year licences were valid during 1984, 3,459 in 1985 and 4,233 during 1986.

3 Prince Rupert totals include licences for Kitimat and Queen Charlotte City districts.

TABLE 35 - THE NUMBER OF LICENCES ISSUED FOR COMMERCIAL FISHERIES BY THE DEPARTMENT OF FISHERIES AND OCEANS: BY FISHERY AND LICENCE CATEGORY 1984 - 1986[1]

FISHERY	LICENCE CATEGORY	1984	1985	1986
Salmon				
General	A	3,679	3,672	3,679
Seine	A	551	550	548
Temporary	B	10	7	5
N.N.F.C.[2]	N	251	253	253
Salmon Subtotal		4,491	4,482	4,485
Roe Herring				
Gillnet	H	1,326	1,327	1,327
Seine	H	251	252	252
Roe Herring Subtotal		1,577	1,579	1,579
Spawn on Kelp	J	28	28	28
Halibut	L	433	434	432
Groundfish Trawl	T	141	142	142
Shrimp Trawl	S	242	247	249
Sablefish	K	46	47	47
Abalone	E	26	26	26
Geoduck	G	54	55	55
Selected Species	C	1,111	1,102	1,092

[1]Information provided by the Licencing Section, Department of Fisheries and Oceans.
[2]Northern Native Fishing Corporation exclusive licences.

TABLE 36 - THE NUMBER OF LICENCES ISSUED FOR COMMERCIAL FISHERIES BY THE DEPARTMENT OF FISHERIES AND OCEANS:

SPECIAL FISHERIES (Z) - UNLIMITED ENTRY - 1984 -1986[1]

		1984	1985	1986
B. Unlimited Licences				
Packing	D	211	198	211
Processor	P	4	5	7
Special Fisheries - Fishing with a Vessel Z				
Clams	Z-A	1	1	0
Weathervane Scallops	Z-B	6	8	1
Red Sea Urchin	Z-C	85	86	103
Sea Cucumber	Z-D	29	40	63
Squid Species	Z-E	99	76	61
Euphausiid	Z-F	8	5	11
Copepod	Z-G	0	0	0
Shrimp	Z-H	693	544	551
Pink or Spiny Scallop	Z-I	17	22	24
Octopus	Z-J	84	73	91
Anchovy	Z-K	20	14	18
Surf and Pile Perch	Z-L	35	21	20
Rockfishes[2]	Z-N	-	-	1,362
Six-gill sharks[2]	Z-O	-	-	0
Special Fisheries - Fishing Without a Vessel Z				
Mussel	Z-1	12	5	9
Welk	Z-2	0	0	0
Winkles	Z-3	1	0	0
Top Snail	Z-4	1	0	0
Limpet	Z-5	1	0	0
Goose Barnacle	Z-6	18	9	25
Octopus	Z-7	13	15	13
Smelt	Z-8	25	30	34
Eulachon	Z-9	3	1	1

1 Information provided by the Licencing Section, Department of Fisheries and Oceans.

2 Newly introduced licence categories.

TABLE 37 - THE NUMBER OF FISH PROCESSING, FISH BUYING AND FISHERMAN'S VENDING LICENCES ISSUED BY THE MINISTRY OF AGRICULTURE & FISHERIES: BY LICENCE TYPE - 1984 - 1986[1]

	1984	1985	1986
Processing Licences			
Commercial Salmon Cannery	13	16	14
Sport Caught Salmon Cannery	2[2]	-	-
Salmon	90	89	105
Roe Herring	38	33	31
Fin Fish	76	83	82
Invertebrates	87	89	105
Cold Storage:			
a. over 80 m^3	53	57	63
b. under 80 m^3	44	45	53
Marine Plants	0	2	2
Buyer Licence Decals Issued			
Salmon	281	273	273
Roe Herring	178	117	185
Fin Fish	96	98	113
Invertebrates	67	82	83
Fisherman's Vending Licences	272	240	203
Oyster Picking Permits	127	197	300
Marine Plant Harvesting Licences	27	27	36[3]

1 Covers the fiscal year period from April 1 to March 31.
2 Four companies were licenced to can sport caught fish in 1984, two were already covered by commercial salmon cannery licences while the others were exclusively licenced as sport caught canneries. In 1985 and 1986 all sport caught canneries were already licenced as commercial canneries.
3 Salicornia industry development accounted for 14 issued licences.

TABLE 38 - NUMBER OF BRITISH COLUMBIA FISH PROCESSING FACILITIES BY GEOGRAPHIC REGION 1
1985/86 - 1986/87

Region	1985/86 Only Canning	1985/86 Only Cold[2] Storage	1985/86 Canning and Cold Storage	1985/86 Plant Only	1985/86 Total Plants	1986/87 Only Canning	1986/87 Only Cold[2] Storage	1986/87 Canning and Cold Storage	1986/87 Plant Only	1986/87 Total Plants
Lower Mainland	2	47	5	25	79	2	48	4	24	78
Southern Vancouver Island	1	28	2	31	62	2	36	1	31	70
West Coast Vancouver Island	-	4	-	2	6	-	5	-	2	7
Northern Vancouver Island	1	-	-	2	3	1	2	-	4	7
Sunshine Coast	-	3	-	6	9	-	5	-	5	10
Central Coast	-	1	-	1	2	-	1	-	-	1
North Coast/Prince Rupert	-	5	4	1	10	-	5	4	2	11
Queen Charlotte Islands	-	2	-	-	2	-	2	-	1	3
Interior of B.C.	-	1	-	-	1	-	-	-	-	-
TOTAL	4	91	11	68	174	5	104	9	69	187

1 Does not include vessels that were licenced to process or companies that leased space in licenced facilities. Sports fish canning facilities are included.

2 This category may include facilities in which fresh/frozen fish products were processed.

TABLE 39 - CANADIAN CONSUMER PRICE INDEX FOR ALL ITEMS AND SELECTED FOOD ITEMS FOR 1985 - 1986

1981 = 100

YEAR	ALL ITEMS	FISH	POULTRY	MEAT
1975	58.5	50.0	61.2	53.7
1976	62.9	55.0	63.1	52.9
1977	67.9	60.7	63.3	54.2
1978	73.9	69.2	72.7	72.1
1979	80.7	76.9	82.4	87.8
1980	88.9	87.4	86.1	93.2
1981	100.0	100.0	100.0	100.0
1982	110.8	109.5	104.4	105.0
1983	117.2	115.0	107.8	105.8
1984	122.3	120.6	114.6	110.8
1985	127.2	125.7	113.0	113.8
1986	132.4	132.0	122.0	121.1

Source: - Canada, Statistics Canada, Consumer Prices and Price Indexes, October - December, 1984. Ottawa: Supply and Services Canada, March 1985.
- Table 8: Consumer Price Index for Canada, All Items, 1973-1984, p. 24.
- Table 9: Consumer Price Index for Canada - Main Components, Sub-groups and Selected Items, pp. 25-26.
- Personal Communication, Statistics Canada, July 12, 1985.
- Personal Communication, Statistics Canada, Sept. 11, 1986.
- Personal " " " Dec. 22, 1987